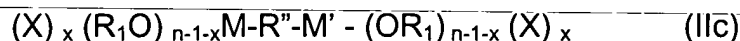
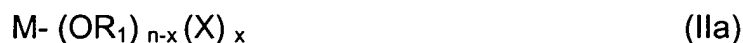


wherein:

- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;
- n denotes the valency of the metal;
- R<sub>1</sub>, which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,
- R and R', which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated, C<sub>1-30</sub> hydrocarbon-based radicals, and a cosmetically active group; and
- R'' is chosen from -O-, -NR<sup>2</sup>-, -S-, linear, cyclic and branched, saturated and unsaturated, C<sub>1-30</sub> divalent hydrocarbon-based radicals, and a cosmetically active group, wherein R<sup>2</sup> is chosen from linear, cyclic and branched, saturated and unsaturated C<sub>1-30</sub> hydrocarbon-based radicals;

(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IId) below:



FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



wherein:

- M, M', n, R, R', R'' and R<sub>1</sub> have the same meaning as above;
- X is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and
- x is the number of atoms which may link to the central metal atom;

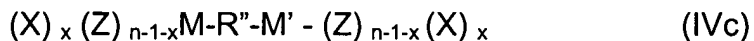
(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:



wherein:

- M, M', n, R, R' and R'' have the same meaning as above; and
- Z, which may be identical or different, is chosen from a halogen atom; and

(d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above;

wherein said cosmetically active group is chosen from a colorant group; a

photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for

a1  
amended

promoting adhesion to keratin materials; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and

wherein said composition is applied to said keratin material in an amount effective to reduce the brittleness of human nails.

a2

16. (Amended) A method according to Claim 1, wherein said amount is effective to obtain at least one of harder nails, stronger nails, less brittle nails, nails which no longer split, and nails which no longer crack.

17. (Amended) A method according to Claim 1, wherein said amount is effective to reduce the brittleness of weakened nails.

a3

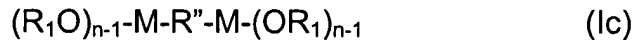
44. (Amended) A method of protecting and/or strengthening a keratin material comprising applying to said keratin material an effective amount of a composition comprising at least one organometallic compound, wherein said amount is effective to reduce the brittleness of human nails.

45. (Amended) A composition in the form of a make-up composition, a nail varnish, a varnish base, a nail-care product or a hair-care product, said composition comprising at least one organometallic compound obtained from at least one metallic precursor chosen from:

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

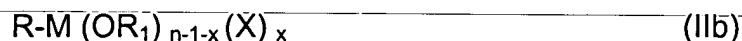
(a) at least one metal alkoxide chosen from formulae (Ia), (Ib), (Ic), and (Id) below:



wherein:

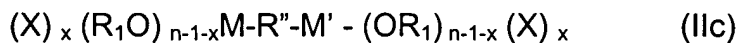
- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;
- n denotes the valency of the metal;
- R<sub>1</sub>, which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,
- R and R', which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated, C<sub>1-30</sub> hydrocarbon-based radicals, and a cosmetically active group; and
- R'' is chosen from -O-, -NR<sup>2</sup>-, -S-, linear, cyclic and branched, saturated and unsaturated, C<sub>1-30</sub> divalent hydrocarbon-based radicals, and a cosmetically active group, wherein R<sup>2</sup> is chosen from linear, cyclic and branched, saturated and unsaturated C<sub>1-30</sub> hydrocarbon-based radicals;

(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IId) below:



FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



wherein:

- M, M', n, R, R', R'' and R<sub>1</sub> have the same meaning as above;
- X is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and
- x is the number of atoms which may link to the central metal atom;

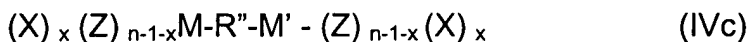
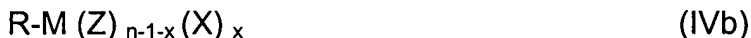
(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:



wherein:

- M, M', n, R, R' and R'' have the same meaning as above; and
- Z, which may be identical or different, is chosen from a halogen atom; and

(d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above;

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

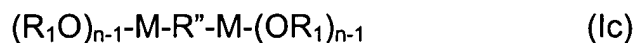
a3  
concl

wherein said cosmetically active group is chosen from a colorant group; a photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for promoting adhesion to keratin materials; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and

wherein said composition is effective to reduce the brittleness of human nails.

48. (Amended) A process for treating a keratin material which comprises applying to said keratin material a composition comprising at least one organometallic compound obtained from at least one metallic precursor chosen from:

(a) at least one metal alkoxide chosen from formulae (Ia), (Ib), (Ic), and (Id) below:



wherein:

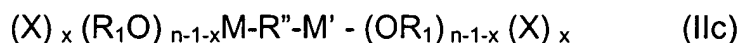
- M and M', which may be identical or different, denote a metal atom chosen from the transition metals of groups Ib to VIIb of the Periodic Table, group VIII of the Periodic Table, the lanthanide group of the Periodic Table, aluminum, silicon, boron, tin, magnesium, alkali metals and alkaline-earth metals;
- n denotes the valency of the metal;

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

- $R_1$ , which may be identical or different, is chosen from linear and branched, saturated and unsaturated hydrocarbon-based radicals containing 1 to 30 carbon atoms,
- $R$  and  $R'$ , which may be identical or different, are chosen from hydrogen, linear, branched and cyclic, saturated and unsaturated,  $C_{1-30}$  hydrocarbon-based radicals, and a cosmetically active group; and
- $R''$  is chosen from  $-O-$ ,  $-NR^2-$ ,  $-S-$ , linear, cyclic and branched, saturated and unsaturated,  $C_{1-30}$  divalent hydrocarbon-based radicals, and a cosmetically active group, wherein  $R^2$  is chosen from linear, cyclic and branched, saturated and unsaturated  $C_{1-30}$  hydrocarbon-based radicals;

(b) at least one complex chosen from formulae (IIa), (IIb), (IIc) and (IIId) below:



wherein:

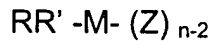
- $M$ ,  $M'$ ,  $n$ ,  $R$ ,  $R'$ ,  $R''$  and  $R_1$  have the same meaning as above;
- $X$  is a ligand comprising an atom chosen from nitrogen, phosphorus, sulphur and oxygen; and
- $x$  is the number of atoms which may link to the central metal atom;

(c) at least one metal halide chosen from formulae (IIIa), (IIIb), (IIIc) and (IIId) below:



FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

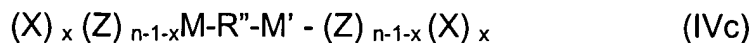
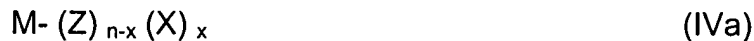
1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



(IIIId)

wherein:

- M, M', n, R, R' and R'' have the same meaning as above; and
  - Z, which may be identical or different, is chosen from a halogen atom; and
- (d) at least one complexes chosen from formulae (IVa), (IVb), (IVc) and (IVd) below:



wherein:

- M, M', n, R, R', R'', X, x and Z have the same meaning as above;

wherein said cosmetically active group is chosen from a colorant group; a photochromic group; a group for screening out UV-A and/or UV-B radiation; a group for promoting adhesion to keratin materials; a group which facilitates make-up removal; a bacterial or bacteriostatic group; a chelating group; a hydroxy acid; a group for preventing hair loss; an antioxidant group; a free-radical-scavenging group; and a vitamin-bearing group; and

wherein said composition is applied to said keratin material in an amount effective to reduce the brittleness of human nails.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com



50. (New) The method according to claim 1, wherein the group for promoting adhesion to keratin materials is chosen from amide, urethane, urea, hydroxyl, carboxyl, amino acid, and polypeptide groups.

51. (New) The composition according to claim 45, wherein the group for promoting adhesion to keratin materials is chosen from amide, urethane, urea, hydroxyl, carboxyl, amino acid, and polypeptide groups.

52. (New) The process according to claim 48, wherein the group for promoting adhesion to keratin materials is chosen from amide, urethane, urea, hydroxyl, carboxyl, amino acid, and polypeptide groups.

53. (New) The method according to claim 1, wherein the chelating group is capable of complexing multivalent cations.

54. (New) The composition according to claim 45, wherein the chelating group is capable of complexing multivalent cations.

55. (New) The process according to claim 48, wherein the chelating group is capable of complexing multivalent cations.

05  
FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com